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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Max L. Musser

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EXAMINER

WOOD, WILLIAM H

ART UNIT

PAPER NUMBER

2193

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/966,040	Applicant(s) MUSSEY ET AL.	
	Examiner William H. Wood	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,11-16 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11-16 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Requirement for Information</u> . |

DETAILED ACTION

Claims 1-2, 4-9, 11-16 and 20 are pending and have been examined.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-9, 11-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **APA** (Admitted Prior Art) in view of **Northcutt** et al. (USPN 6,678,741).

Claim 1

APA disclosed a method for automating distribution of software in a fiber optic network comprising:

(a) identifying software comprised on each of a plurality of firmware cards located in a multiplexor in the fiber optic network (*page 3, line 21 to page 4, line 1*);

(d) identifying further software comprised on at least a further firmware card located in at least one of a plurality of optical network units that are connected to the multiplexor over a fiber optic connection and that art

Art Unit: 2193

connected to one another by an optical channel shelf provided by the multiplexor (*page 3, line 21 to page 4, line 1; page 2, lines 17-18*);

then determining whether there is another multiplexor in the fiber optic network and, if so, repeating the method for the other multiplexor (*page 4, lines 6-9*).

APA did not explicitly state determining whether the software comprised on the various cards located in the network unit is prescribed software version and updating it if not. Also, **APA** did not explicitly state updating for other network units. **Northcutt** demonstrated that it was known at the time of invention to check the firmware of a second unit to synchronize/update the second unit with a first unit (figure 3, column 2, lines 36-42). Further, **Northcutt** disclosed updating additional network units (*column 8, lines 45-48*). It would have been obvious to one of ordinary skill in the art at the time of invention to implement the firmware of fiber optic system of **APA** with updating incompatible versions as found in **Northcutt's** teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to provide firmware which can successfully communicate (**Northcutt**: column 1, lines 32-43).

Claim 2

APA and **Northcutt** disclosed the method of claim 1, wherein identifying the software comprised on each of the plurality of firmware cards located in the

Art Unit: 2193

multiplexor comprises identifying a version for the software (**Northcutt**: figure 3, column 2, lines 36-42).

Claim 4

APA and **Northcutt** disclosed the method of claim 1, wherein identifying the software comprised on each of the plurality of firmware cards located in the multiplexor comprises identifying software comprised on an optical interface unit card (**APA**: page 3, line 21 to page 4, line 1; page 2, lines 17-23).

Claim 5

APA and **Northcutt** disclosed the method of claim 1, wherein identifying the software comprised on each of the plurality of firmware cards located in the multiplexor comprises identifying software comprised on an optical multiplexing unit card (**APA**: page 3, line 21 to page 4, line 1; page 2, lines 17-23).

Claim 6

APA and **Northcutt** disclosed the method of claim 1, wherein identifying the software comprised on the firmware card located in the network unit comprises identifying software comprised on an optical interface unit card (**APA**: page 3, line 21 to page 4, line 1).

Art Unit: 2193

Claim 7

APA and **Northcutt** disclosed a computer readable medium having computer executable instructions stored thereon for performing the method recited in claim 1 (**Northcutt**: column 2, lines 62-63).

Claim 8

The limitations of claim 8 are substantially the same as for claim 1 and are rejected in the same manner.

Claim 9

APA and **Northcutt** disclosed the method of claim 8, wherein identifying the software comprised in the multiplexor comprises identifying the software version (**Northcutt**: figure 3, column 2, lines 36-42).

Claim 11

APA and **Northcutt** disclosed the method of claim 8, wherein determining if the software on each network unit is compatible with the software on the multiplexor comprises determining if a software version on each network unit is compatible with a software version on the multiplexor (**Northcutt**: figure 3, column 2, lines 36-42).

Art Unit: 2193

Claim 12

APA and **Northcutt** disclosed the method of claim 8, wherein identifying software comprised in the multiplexor comprises determining a version of software on a firmware card in the multiplexor (**Northcutt**: figure 3, column 2, lines 36-42; **APA**: page 3, line 21 to page 4, line 1).

Claim 13

APA and **Northcutt** disclosed the method of claim 12, wherein determining the version of software on the firmware card in the multiplexor comprises determining the version of software on at least one of a optical interface unit card and an optical multiplexing unit card (**APA**: page 3, line 21 to page 4, line 1; page 2, lines 17-23).

Claim 14

APA and **Northcutt** disclosed the method of claim 8, wherein identifying the software comprised in the network unit comprises determining a version of software on a firmware card located on the network unit (**APA**: page 3, line 21 to page 4, line 1; page 2, lines 17-23).

Claim 15

APA and **Northcutt** disclosed the method of claim 14, wherein determining the version of software on the firmware card located on the network unit comprises

Art Unit: 2193

determining the version of software on an optical interface unit card (**APA**: page 3, line 21 to page 4, line 1; page 2, lines 17-23).

Claim 16

APA and **Northcutt** disclosed a computer readable medium having computer executable instructions for performing the method of claim 8 (**Northcutt**: column 2, lines 62-63).

Claim 20

The limitations of claim 20 are substantially the same as for claim 1 and are rejected in the same manner.

Response to Arguments

3. Applicant's arguments filed 16 February 2006 have been fully considered but they are not persuasive. Applicant argues: **APA** fails to disclose, "determining whether there is another multiplexor in the fiber optic network and, if so, repeating the method for the other multiplexor"; and no motivation to combine **APA** with **Northcutt**. These arguments are not persuasive. First, **APA** (page 4, lines 6-9) addresses "each ONU card and each multiplexor card". Second, **Northcutt** was cited specifically for teaching checking the firmware of a second unit to synchronize/update the second unit with a first unit.

Art Unit: 2193

Therefore, having addressed the raised concerns, the rejections are maintained as above indicated.

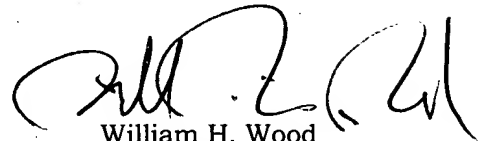
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 10:00am - 4:00pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)-272-3756. The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR systems, see <http://pair-direct.uspto.gov>. For questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.



William H. Wood
Patent Examiner
AU 2193
February 26, 2007

DETAILED ACTION
REQUIREMENT FOR INFORMATION

37 CFR 1.105

§ 1.105 Requirements for information.

(a)

- (1) In the course of examining or treating a matter in a pending or abandoned application filed under 35 U.S.C. 111 or 371 (including a reissue application), in a patent, or in a reexamination proceeding, the examiner or other Office employee may require the submission, from individuals identified under § 1.56(c), or any assignee, of such information as may be reasonably necessary to properly examine or treat the matter, for example:
- (i) Commercial databases : The existence of any particularly relevant commercial database known to any of the inventors that could be searched for a particular aspect of the invention.
 - (ii) Search : Whether a search of the prior art was made, and if so, what was searched.
 - (iii) Related information : A copy of any non-patent literature, published application, or patent (U.S. or foreign), by any of the inventors, that relates to the claimed invention.
 - (iv) Information used to draft application : A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used to draft the application.
 - (v) Information used in invention process : A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used in the invention process, such as by designing around or providing a solution to accomplish an invention result.
 - (vi) Improvements : Where the claimed invention is an improvement, identification of what is being improved.
 - (vii) In Use : Identification of any use of the claimed invention known to any of the inventors at the time the application was filed notwithstanding the date of the use.

- (2) Where an assignee has asserted its right to prosecute pursuant to § 3.71(a) of this chapter, matters such as paragraphs (a)(1)(i), (iii), and (vii) of this section may also be applied to such assignee.
- (3) Any reply that states that the information required to be submitted is unknown and/or is not readily available to the party or parties from which it was requested will be accepted as a complete reply.
- (b) The requirement for information of paragraph (a)(1) of this section may be included in an Office action, or sent separately.
- (c) A reply, or a failure to reply, to a requirement for information under this section will be governed by §§ 1.135 and 1.136.
[Removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997; added, 65 FR 54604, Sept. 8, 2000, effective Nov. 7, 2000]

Requirement for Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application. Upon review of the submitted Applicant's Response of 16 February 2006, it is determined that the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent before 28 September 2001 (application filing date). The specifics of the public knowledge or use indicated by Applicant's disclosure must be analyzed in a determination of applicability under 35 U.S.C. § 102(a,b). Specifically, in response to the requirement, Applicant is requested to provide above-referenced information (for example, know or used by others or patented or described in a printed publication) regarding the following features disclosed in the instant application:

1) "Existing systems have the capability to query a network element such as an ONU or HDT for the version of software running on a particular card on a particular machine" (page 3, line 21 to page 4, line 1).

2) "These ONU's are connected to corresponding multiplexors, which may be referred to as host digital terminals ("HDT's"). HDT's may be located, for example, in remote terminals (RT's) that are connected through routers located in central offices (CO's). Generally, the ONU's and HDT's comprise firmware cards therein." (page 2, lines 17-23).

3) Each paragraph of the background section (pages 1-4) of the instant application.

Additionally, in response to the requirement, Applicant is requested to provide a factual statement explaining the identification of the other entities mentioned in the background section of Applicant disclosure (Marconi Communications Inc, page 2, line 14; "service providers", page 3, line 11; "existing systems", page 3, line 21). In so doing, Applicant should answer the following questions: are these entities different from the inventive entity of the instant application; and do these entities produce systems as described in the background section of the instant application.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the

requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item.

Art Unit: 2193

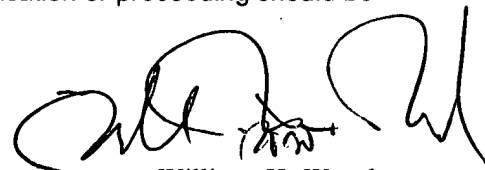
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)-272-3719. The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.



William H. Wood
Patent Examiner
AU 2193
February 8, 2007



MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER